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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,898	03/23/2004	Adrian P. Stephens	884.B94US1	2401
21186	7590	10/25/2007		
SCHWEGMAN, LUNDBERG & WOESSNER, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			EXAMINER PEREZ, JULIO R	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 10/25/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/806,898	<b>Applicant(s)</b> STEPHENS, ADRIAN P.	
	<b>Examiner</b> Julio R. Perez	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 August 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-6,8-11,13-17,19-22 and 24-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8, 10-11,13, 16-17,19-22 and 24-30 is/are rejected.
- 7) ☒ Claim(s) 9,14 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 8, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (US 20060166619) in view of Belcea (US 20030185166).

Regarding claims 1,8, Roberts discloses a number of channels (Figure 14, CHs 1 through 10), a center channel (Figure 14, center channel 8.208 GHz on a high band, pars. 174,176, show choosing the proper center channel and adjacent channels to the center channel; thus, contiguous channels); and selecting a group of contiguous communications channels including the number of channels, a center channel (col. 5, lines 1-10, 40-60, show the selection of adjacent to include center channel).

What Roberts does not explicitly disclose is the control channel.3

Belcea teaches indicating a control channel among the channel configuration within an 802.16 IEEE standard (par. 9, lines 3-6; par. 188; claim 7, lines 4-8; claim 9).

It would have been obvious to one skilled in the art at the time of the invention to modify Roberts, such that to include a control channel, to provide the control channel for transmission of control messaging information.

Regarding claim 11, the combination teaches the group further includes at least a portion of the contiguous communications channels to include the center channel and

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the control channel (Roberts, Figure 14, center channel 8.208 GHz on a high band, pars. 174,176, show choosing the proper center channel and adjacent channels to the center channel; thus, contiguous channels).

3. Claims 3, 4, are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts and Belcea in view of Van De Berg (5,907,812).

Regarding Claims 3, 4, the combination teaches claim 1, but is silent on wherein alternately selecting an additional channel not included in the portion on an opposite side of the center channel as the control channel, and on a same side of the center channel as the control channel, until the specified number of channels is selected.

Van De Berg teaches a transmission scheme where a sided numbered of channels C1-C25 are spread around the center frequency on the range R, on the opposite or same side of the center frequency, which read on the portion on an opposite side of the center channel as the control channel (Figure 5, col. 7, lines 28-55).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Roberts, such that opposite or same side frequencies are chosen to correspond to center and control channels, to provide means to a better selectivity on the whole range of the frequency band:

4. Claims 5, 6, 10, 16, 17, 21, 25, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts and Belcea in view of Kong et al. (US 20040192208A1).

Regarding claims 5, 6, 10, 16, 17, 21, 25, 30, the combination teaches claim 1, but is silent on wherein selecting the group further selecting the control channel to overlap a legacy channel.

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Kong teaches a transmission scheme wherein legacy channel transmissions are processed and included with center and control channels (Figure 5A, par. 31, lines 12-17, par. 45, lines 13-15, par. 47).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Roberts, such that legacy channels are covered in conjunction to

5. Claims 13, 19, 20, 22, 24, 26, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Roberts and Belcea in view Saunders et al (US 20040142696A1).

Regarding claims 13, 19, 24, the combination discloses selecting a first group of contiguous (i.e., adjacent) communications channels using a specified control channel (col. 2, lines 63-67 – col. 3, lines 1-5, 26-33, teach a selection of adjacent channels, but is silent on a signed extension channel offset.

Saunders teaches a transmission scheme wherein a number of channels are scanned on a burst containing a series of  $\pm$  ones frequencies (i.e., channels), which read on signed extension channels (pars. 32, 136).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Roberts, such that offset of numbered channels being integrated into the system to provide a mechanism for selecting a wider range on the frequency band.

Regarding claim 20, the combination of Roberts and Saunders teaches a value of the signed extension channel offset is selected from an integer (Saunders, par. 136,  $\pm 1$ ).

Regarding claim 22, the combination of Roberts and Saunders teaches a positive value of the signed extension channel offset refers to a frequency spectrum above a spectrum including the control channel, and wherein a negative value of the signed extension channel offset refers to a frequency spectrum below the spectrum including the control channel (Saunders, Figure 21, par. 136).

Regarding claim 26, the combination of Belcea and Saunders teaches a memory to couple to the channel selection module and to store an indication of the group (Saunders, pars. 136, 138-139).

Regarding claim 27, the combination of Roberts and Saunders teaches a memory to couple to the channel selection module and to store an indication of at least one overlapped legacy channel (Saunders, pars. 136, 138).

6. Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts and Saunders further in view of Banker et al (US 5485221A).

Regarding claim 28, Roberts teaches selecting a first group of contiguous communications channels having a specified control channel (col. 5, lines 1-10, 40-60, show the selection of adjacent to include center channel), but is silent on a signed extension channel offset and a display to display information for communication.

Saunders teaches a transmission scheme wherein a numbered of channels are scanned on a burst containing a series of +/- ones frequencies (i.e., channels), which read on signed extension channels (pars. 32, 136).

Banker teaches displaying of virtual channel in a second contiguous portions (col. 19, lines 27-36).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Roberts and Saunders, such that offset of numbered channels being integrated into the system to provide a mechanism for selecting a wider range on the frequency band and to provide information visualized during communication.

Regarding claim 29, the combination of Roberts, Saunders and Banker disclose an energy conduit to couple to the group and selected from one of an omni directional antenna and a transceiver to couple to the energy conduit and to communicate information using the first group (Saunders, pars 80-81, teach a master transceiver coupled to an omni directional antenna for transferring energy via channels).

***Allowable Subject Matter***

7. Claims 9, 14, 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

8. Applicant's arguments with respect to claims 1, 3-6, 8-11, 13-17, 19-22, 24-30, have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio R. Perez whose telephone number is (571) 272-7846. The examiner can normally be reached on 10:30 - 6:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William G. Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Julio R Perez  
Examiner  
Art Unit 2617

10/18/07

JP

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